



MLTI Student Tech Team Conference

~ 2010 Focus: M-STEM ~

Maine Learners, Science, Technology, Engineering, & Mathematics

May 27, 2010

University of Maine Orono

Block 2 Workshop Sessions

10:40 AM – 11:40 AM

B201: Scoring the Music of Flight: Creating Film Music for Scenes of Flying

Presenter: Alan Kaschub - Instructor of Music, USM School of Music

In this session, participants will listen carefully to excerpts of film music from flying scenes, examine techniques that composers use to illustrate flight and compose their own flying music to a scene from a movie. Students will learn to "score to picture" in Garageband, add cues for important moments, and use advanced features of Garageband to create a compelling film score. No experience with music, music notation, music theory or playing an instrument is necessary.

B202: Maine Memory Network: Accessing, Detecting, and Interpreting State History Online

Presenters: Steve Bromage - Assistant Director of the Maine Historical Society, Larissa Vigue Picard, Community Partnership Coordinator, and Rachel Miller, AmeriCorps Education Assistant

This presentation will go behind the scenes of Maine Memory Network, the nationally-recognized statewide digital museum, to reveal how easy it is to use the Network's classroom-ready, user-friendly, and fun resources and tools. Maine Historical staff will lead participants through a highly interactive session on the resources and tools of Maine Memory Network. From searching for a variety of primary documents, to using analysis tools like the "zoom" feature to uncover artifact mysteries, to creating thematic albums, galleries, and exhibits, participants will become instant "history detectives" as they research and interpret Maine history online.

B203: Modify on the Fly!

Presenter: Cynthia Curry - MLTI Statewide Integration Mentor

Do you sometimes have a hard time reading from your laptop screen? Did you know there are lots of ways to change the look of what you see on your screen? You can even create sound files of documents and Web pages and listen to them on your iPod or MP3 player. And you can do all of this with a few clicks on your MLTI laptop! After attending this session, anyone will be able to modify their own learning materials (e.g., Web pages, documents) so that they are better able to understand them. Come to this session and begin modifying on the fly - on the fly!

B204: Why on Earth, or off, should anyone use robotics in the classroom?

Presenter: Tom Bickford - Director of Maine Robotics

Robotics have been on the cutting edge of science for the past few decades. Imagine exploring space as well as the deep reaches of the oceans. Imagine working with equipment to turn an idea into a project

and finally into reality. Imagine asking the question, "What can it do?" only to find out it can do what we want it to do. Now imagine that you can do all that! In this session you'll not only learn about the ideas of robotics, you'll get your hands on them as well! Ready, set, PROGRAM!

B205: Scratching Deeper - Scratch Programming Power Tips

Presenters: Mark "Paddle2See" Goff - MIT Scratch Team Member and Experienced Scratcher & Gail Garthwait - UMaine College of Education and Human Development

Learn some expert "tricks" to improve your skillz in MIT's popular Scratch programming language! In this hands-on workshop we will explore little-known power features of the Scratch program as well as proven algorithms you can use in your animations and games. Basic prior experience with Scratch is recommended.

B206: Oh, The Places You Will Go! Underwater Video, iMovie, & Global Travel

Presenter: Patti Irish, Video Producer and Underwater Videographer

Patti will share secrets of making a great video and work with participants to make their own underwater video using iMovie. With the help of a CD full of rare and fabulous video clips and still images from Indonesian and Solomon Island coral reefs, participants will learn techniques of taking quality video, telling a story and video editing. Participants in this session will learn some great tips and tricks in iMovie, as well as getting to know an underwater video professional who used to teach Middle School Science!

B207: Think you might have a future in IT?

Presenter: Scott Barber - National Technical Services Manager - Apple, Inc.

This is the real deal. Find out if you have got what it takes. Take advantage of this unique opportunity to engage with someone who really know how things work in the professional IT world. Listen to and speak with one of Apple's top Engineering Managers to find out what it takes, who is doing it, and where you might want to start focusing your energy to have the future you desire.

B208: Automate your MacBook: Making Workflows with Automator

Presenter: Eric Williams - Project Engineer - Apple, Inc.

Sure, Macs are great machines, and the MLTI MacBook is a powerful tool for learning. But you're a geek, so what if you could get under the hood of your computer and ask your MLTI MacBook to handle some specific tasks in your own customized way? In this session, updated this year to leverage Mac OS 10.6 Snow Leopard which will be arriving in the MLTI come fall, we'll discuss how you might start taking control of your Macintosh. Computers are great tools for doing what you tell them to do, especially for repeated tasks. Automator is a free tool in Mac OS X that gets you started down the path of making your Mac work for you. We'll collaborate as a group to develop workflows to solve problems, then see if Automator can be used to develop simple programs to make the computer do the work. Bring your MLTI MacBooks and your ideas!

B209: iMovie & Final Cut - Making Movies That Are a "Cut Above the Rest!"

Presenter: Jon Carr - Project Engineer - Apple, Inc.

iMovie has unleashed some serious creativity across the MLTI. Are one of the many folks who have

been using iMovie inside and outside of class? Are you one of the folks who keep on coming up with new things you want to make iMovie do? If that is you, then this is the session for you! Not only will you be able to get some great tips and tricks for using iMovie more effectively, you'll also be introduced to the Final Cut suite. Apple's Final Cut is the choice of pros in the movie making world, so if you're getting serious about making movies, you'll want to know what the serious movie makers are using...

B210: Oh My Goodness! I Blew up the Screen!

Presenter: Bruce Segee - Super Computing, Electrical and Computer Engineering Department at UMaine

This session will explore high resolution visualization using tiled displays. Students will generate large images based on inquiry-based exploration. Students will work in teams to not only create the images, but also to view them. Each student's laptop will be used to display a piece of the overall image, allowing both a larger display and higher resolution than could be attained with a single laptop.

B211: Making History in Your Attic: Creating and Using Digital Primary Source Material

Presenter: Jim Wells, MLTI Statewide Integration Mentor & Hannah Marcus, Maine State Archives

The letters your grandmother wrote to her family from her time in the service in Korea...the stories your father tells you of summer vacation shenanigans when he was young...the Civil War rifle your uncle has in pride of place on his wall...All of these are primary source material that can be used to tell the story of your family, the community you are part of and our shared history. In this session participants will find out how to produce digital copies and products of these and other artifacts with cameras, Garageband, iMovie and other applications. These can then be shared and used by countless others to piece together the stories of history. Use the digital copies to begin telling your story, with applications such as Acorn, Google Earth and Comic Life. Discover how to contribute to the growing jigsaw of our history in many online spaces.

B212: Searching the Web - It Is Far From Trivial! v5.0

Presenters: Barbara Greenstone - MLTI Statewide Integration Mentor & Sylvia Norton - Maine State Library

Back for another year and cleverly updated for 2010... In an ongoing game of "Not so trivial pursuit," participants will be competing for prizes for themselves, and for their school! Dust off those Boolean Logic skills, and come ready to search!

B213: It's All About Design - Using Sketchup Like a Pro

Presenters: Bonnie Roskes - 3Dvinci.net & Ann Marie Quirion Hutton - Professional Development Specialist, Apple, Inc.

Have you ever found yourself wondering, "If Sketchup is not a toy, then how come it is so much fun???" In this session you'll have plenty of fun as you learn some power tips from a real Sketchup professional. Participants will get started designing the room of their dreams - building the walls, importing components, creating your own components, and more! (NOTE: As an added bonus experience, presenter Bonnie Roskes will be joining the conference via teleconference, so participants will not only be learning about current tools, they'll be learning in a very current way!)

B214: Sneak Peek v4.0 - The 2010-2011 MLTI Image

Presenter: Jeff Mao - Learning Technology Policy Director - Maine Department of Education

Here is your annual chance to be "ahead of the curve" in terms of knowing what's up with the MLTI! Life goes on... The MLTI continues to evolve. Change happens, and come Fall of 2010 the MLTI MacBooks will once again be running on a new image. For starters, Snow Leopard, Mac OS X 10.6 will be in place! So come see what's up, and hear about what software is sticking around, and what will be new - be ahead of the game, so when the rest of the class is asking, "What happened to...?" you can reply with - "Oh, here is how you do that now, and in fact, let me show you some cool stuff we couldn't do before!"

B215: Better Organization Through Metadata

Presenter: Curtis Armstrong, Apple, Inc.

Keeping files, folders, music, movies, and pictures organized can be a daunting, never ending chore. But with the built-in tools on your MacBook, a little planning, and the metadata stored in each and every file, organizing can be fun! During this session, participants will learn how to build Smart Folders in Finder, Smart Playlists in iTunes, and Smart Albums in iPhoto. These "smart" items will help to organize and categorize nearly anything on your Mac.

B216: Kill A Watt to Save Energy

Presenter: Stefany Arsenault, Maine Energy Education Program

In this session participants will learn how to find out about appliance energy use by reading electric nameplates. But what can you do when you find out your refrigerator is an Energy Hog? Never fear! We'll then learn how to use Kill A Watt meters. The challenge will be for participants go home and find out how much energy their appliances use. You'll even learn about Phantom Loads and how to stop them. So... How much electricity does your cell phone charger use? Is your TV consuming energy even when you think it's turned off? Come learn how to investigate electricity use in your home. Let's work together to save energy!

B217: Be a Real Guitar Hero

Presenters: Steve Garton, Coordinator of Educational Technology, Maine Department of Education & Brian Martin, AppleCare Strategic Account Manager, Apple, Inc.

GarageBand has the built in capability of easily integrating live guitar and keyboard. Come see how simple it is to use live instruments or your voice with the MacBook without expensive additions. Step by step examples will be given to help you create your own backgrounds, input your own instrument, and record the result. This session will even show you how to create a band with your friends and their MacBooks. Don't just play Guitar Hero... Be one!

B218: Digital Photography Through a Professional Lens

Presenter: Chris Knapp - Technical Sales Rep - Nikon Corporation

Sure, everyone can take digital images. Point, shoot, download, share. But what if you want to go farther? What if you want to shoot like a pro, to know the things the average digital photographer will never know? Here's your chance to spend an hour with a digital photography pro. In this session you'll

learn a host of new skills, and have a chance to practice what you're learning. Be sure to bring along your digital camera, your questions, and be ready to grow! (And by the way, if you are thinking you'd like to have one of your images chosen to be part of the next screensaver set, you really do need to be here!)

B219: Publishing Your Book Made Easy

Presenter: David Patterson - Educational Specialist, Maine Department of Education

Do you have a story to tell? Have you ever dreamed of having your own book published? Well, now you can! Using intuitive software and online technologies, you can have your own work published as a book. We will explore several options for easily compiling your compelling content into a stunning book, and we will also examine options to have your masterpiece professionally printed and shipped, or saved as an e-book that you can share with your audience on screen.

B220: It's about the Apps for the iPhone, iPod Touch and the new iPad

Presenter: Steve Hayman - National Consulting Engineer with Apple's Education Team

Combine a cool device with a creative mind and an incredible development environment and you get tons of great Apps. Maybe you have something in mind. This session will discuss and demonstrate Apple's software development tools for the iPhone, iPod Touch and the new iPad, and show how individuals and institutions are building innovative mobile applications for their organizations and the wider world. We'll highlight and deconstruct some popular applications - both web-based, and native with Apple's free developer tools. We'll talk about web development with Dashcode, native application development with Xcode and Interface Builder, and review the integration and deployment options and Apple's developer program.

B221: Moving Into Your New iPad!

Presenters: Tara Maker & Lars Ljungholm - Apple Inc.

On April 3rd Apple introduced and opened our new addition... The iPad! In this session we will explore this extraordinary device and share how you can use what you are learning now through use of your MLTI MacBook to move in and get comfortable in the new space. As part of this experience we will introduce you to the latest cool apps and help you discover where this exciting new tool fits in your digital world. The iPad introduces a whole new world of apps with more coming every day. From games to education to productivity, there are thousands of new apps made just for iPad. They're unlike anything you've seen or touched before, and this is just the beginning. We'll even discuss how to use an iPad to improve learning! Come join us as we check out the new digs of the future!

B222: Uncloaking the Wizard: Storytelling and the Machinery of Games

Presenter: Ruben Puentedura - Founder and President, Hippasus.com & Tim Hart, UMaine College of Education and Human Development

Have you ever had a great idea for a role-playing game - but stopped when you realized that you'd need to learn to program first to make it come to life? Have you looked at the stories being told by commercial games and wanted to tell a more interesting tale? And have you ever wondered whether a game could improvise new responses to unexpected player strategies?

If you answered yes to any of these questions, then join us as we explore, play, and create new games

using "Sleep Is Death", a game development environment created by Jason Rohrer. (Don't be alarmed by the "dark" sounding name of this game! According to the creator, it is a reference to lines such as those in Shakespeare's Macbeth: "Sleep that knits up the ravell'd sleeve of care, The death of each day's life, sore labour's bath, Balm of hurt minds, great nature's second course, Chief nourisher in life's feast.") All participants in this session will receive a full copy of the toolkit of their own, so you can continue to create and play games after the workshop is done.

B223: Maine Students' Response to Invasion - Students as Real Scientists

Presenters: Alexa Dayton, Gulf of Maine Research Institute & Phil Brookhouse, MLTI Statewide Integration Mentor

With an aim to monitor the spread of invasive plant and animal species in Maine, the Vital Signs project brings together middle and high school students, educators, professional and citizen scientists in the collection, analysis and use of environmental data. This session will introduce you to the work people around Maine are undertaking to track invasive species, the database that is expanding every week, and what you should be looking out for in your area. Learn how to take the data collected and create Google Earth layers, how to use the data in projects and how you can be part of the project.